REMARKS

Claims 1-14 remain in the application. It is respectfully submitted that all of these claims are allowable.

The Rejection

I. Claims 1-14 have been rejected under 35 USC §103(a) as being unpatentable over Bilodeau U.S. 6,235,363 in view of Weeks U.S. 5,763,122 and Aoyama et al U.S. 4,713,296.

Bilodeau discloses a composite construction for use as a label or tape that is adhered to a second substrate comprising a first substrate which may be comprised of a polymer film of polyvinyl chloride (column 13, lines 20-23) wherein the first substrate has a faceside and an underside opposite the said faceside, an adhesive layer, and a barrier layer adhered to the underside of said first substrate and positioned between the first substrate and the adhesive layer. The Examiner has stated that the barrier layer is cured using ultraviolet light and comprises a wax, surfactant or a combination thereof. Also, the adhesive layer is comprised of a pressure sensitive adhesive of an acrylate or methacrylate, and Bilodeau discloses the use of 10-30% by weight of N-vinyl-2-pyrrolidone or N-vinyl caprolactam as part of the adhesive layer.

The Examiner acknowledges

> Bilodeau fails to disclose the barrier layer comprising a radiation cured acrylic epoxy derived from at least 65-90% of one acrylated epoxy oligomer and 1-10% by weight of at least one photoinitiator, wherein the barrier layer is substantially impervious to migratory components of said first substrate, and at least one reactive diluent selected from N-vinyl-2-pyrrolidone and N-vinyl caprolactam and about 10-30% by weight (page 3).

Weeks is relied upon by the Examiner for teaching a barrier layer comprising a radiation cured acrylated epoxy derived from at least one acrylated epoxy oligomer that is derived from polycaprolactone hexol and 0-10% by weight of at least one photoinitiator, wherein the barrier layer is substantially impervious to migratory components of said first substrate. The barrier layer is utilized for the purpose of preventing interaction between the color layer and the adhesive while improving the developability of the non-image areas.

Aoyama et al teach the use of N-vinyl-2-pyrrolidone (column 10, lines 30-35) at a concentration of about 10-30% by weight as part of a barrier layer to form a laminate that is superior to gas properties.

Based on the above references, the Examiner has concluded that it would have been obvious to one of ordinary skill in the art at the time the Applicants' invention was made to have provided a barrier layer having the desired composition in Bilodeau in order to prevent interaction between the color layer and the adhesive while improving the developability of the non-image areas as taught by Weeks and to form a laminate with a gas barrier that is superior in gas barrier properties as taught by Aoyama et al. (Page 4).

Reconsideration and withdrawal of this rejection is requested. As acknowledged by the Examiner, Bilodeau '363 does not teach a barrier layer which comprises a radiation cured acrylated epoxy derived from at least one acrylated epoxy oligomer and at least one reactive diluent selected from N-vinyl-2-pyrrolidone (NVP) or N-vinyl caprolactone (NVC). The secondary references also fail to teach this composition as a barrier layer. It is respectfully submitted that there is no teaching or suggestion in the secondary references which would have made it obvious to one skilled in the art to modify the polymer utilized in the barrier layer by Bilodeau '363 in a manner which would result in the use of the cured acrylated epoxy described in the claims of the present application.

The teachings of the prior art with regard to the polymer composition utilized in the barrier layer as compared to the composition utilized in the barrier layer of the present invention is summarized in the following table.

Barrier Layer Composition

	Reactant	Coreactant
Invention	Acrylated epoxy	NVP or NVC
Bilodeau '363	Cycloaliphatic epoxy	Polyol
Weeks '122	Acrylated epoxy	Acidic compound
Aoyama '296	Ethylene vinyl alcohol	NVP

It is respectfully submitted that the three references relied upon by the Examiner teach three different polymeric compositions useful as barrier layers in various constructions and that these three compositions are different from and would not suggest the composition utilized in the present invention. Applicants submit that there is no teaching or suggestion in Weeks '122 or Aoyama '296 that would render it obvious to substitute an acrylated epoxy for the cycloaliphatic epoxy utilized by Bilodeau and/or the substitution of NVP or NVC for the polyol utilized by Bilodeau. Bilodeau '363 contains neither of the two reactants utilized in the present invention, and the barrier compositions described in Weeks and Aoyama are significantly different from the compositions utilized in the present invention. The combination of an acrylated epoxy and NVP or NVC is not suggested in and would not have been obvious from a combination of the teachings of the three references relied upon by the Examiner.

CONCLUSION

In view of the above deficiencies of both the primary and the secondary references cited by the Examiner, and the above comments, Applicants respectfully submit that the rejection of claims 1-14 as being obvious over this combination of references should be withdrawn. An early action allowing claims 1-14 is solicited.

Respectfully submitted,

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